

Appendix A

Section 404(b)(1) Water Quality Evaluation

**GUADALUPE RIVER FLOOD CONTROL PROJECT
CONSTRUCTION OF VEHICULAR BRIDGE
DOWNTOWN SAN JOSE, CALIFORNIA
SANTA CLARA, COUNTY**

Section 404(b)(1) Evaluation

I. Project Description

Location

The project area for the vehicular bridge lies within the project boundaries that was identified as Segment 3A of the Guadalupe River Flood Control Project; San Jose, California, and the area of effects described in the draft Environmental Assessment (EA) encompasses the Guadalupe River channel at the former UPRR Bridge #3 site, the vicinity of the surrounding streets leading to where Union Pacific Railroad (UPRR) Bridge No. 3 is located, and the immediate area that is adjacent to the Sobrato Properties.

General Description

The proposed action is to construct a vehicular bridge. The overall general site plan of the project including limits of work (footprint) for the vehicular bridge is illustrated in Plate 2 (G-3). Bore hole drillings would be undertaken prior to construction of the bridge. Design of all bridge components is based on AASHTO/Caltrans "Bridge Design Specifications (BDS)." Analysis of the pre-cast/pre-stressed "I" girders was conducted using Imbsen Associates BDS program. Initial bridge design was conducted for static bridge loading including the self-weight of the bridge elements, additional dead load of the sidewalk and railings, and future wearing surface replacement. Bridge deck and girders were evaluated for two stages of construction as well as final design. Girders were designed to be simply supported initially, carrying only self-weight and the bridge deck. Once the deck slab cures, the girders are fixed at the ends as so the bridge deck reinforcing has been designed to carry the resulting negative movements at the supports. Design of the girders was evaluated for the full additional dead loads and live loads as well.

As shown in the plans and specifications of the Vehicular Bridge General Plan, Plate 3 (V-1), a two lane vehicular bridge having a 34-foot-wide lane width complying with City of San Jose Standards. On the bridge, two 7-foot wide sidewalks with curbs, guard rails, and light posts would also be included. The roadway east of the culvert would be constructed by others. The new bridge would be constructed using two piers placed within the river channel and removal of all of the UPRR Bridge No. 3's wooden piers, which are a flood hazard as debris builds up onto it. The two seat abutments would be spaced approximately 45 feet from the each the piers, which the two piers are placed further down slope towards the river.

The bridge, as designed with seismic parameters, consists of three spans of 8 pre-cast-pre-stressed "I" girders per span. Concrete seat abutments would be constructed at the beginning and

end of the bridge are standard cantilever seat type abutments with wing walls. The seat abutment provides more control over the amount of earthquake force the abutment would resist, but introduces the potential for the superstructure becoming unseated leading to a collapse of the end span. The superstructure is restrained longitudinally in one direction by the abutment backwall and approach embankment, and transversely by shear keys built into the abutment. The bridge is supported by two interior pier wall type bents. The two piers to be constructed within the channel would be spaced approximately 75 feet apart to maximize channel width in the Guadalupe River. Additionally, the ends of the pier walls are designed to be rounded to minimize the adverse effects on flow around the structure, geomorphology, and to aquatic fish habitat supporting threatened steelhead and chinook salmon. Foundations for the seat bridge abutments and piers consist of 12-inch square 70-ton, 70-foot long pre-cast driven piles and pile caps. As shown in Plate 3, a plan and profile of the bridge and a typical pier cross section are illustrated. The total bridge span from abutment-to-abutment would be approximately 165 feet. On the east bank of the channel, a construction access ramp would be constructed. The new alignment has the centerline of the new vehicular bridge abutment would be realigned approximately 20 feet north (downstream), and the west bank abutment overlies the location of the former Bridge No. 3 rather than 40 feet of the original bridge alignment as originally conceptualized to reduce the environmental effects to the channel (see new alignment shown in aerial photo, Plate 4). This alignment modification was made to reduce environmental effects on the river banks and to eliminate having to skew the bridge piers. Conventional at-grade-level pedestrian crosswalks would be completed at the east and west ends of the bridge, which would connect and provide safe public access to the existing sections of the Riverwalk/maintenance road.

a. Background

In accordance with the Corps Guadalupe River Project, Downtown San Jose, California and the April 2003 Memorandum of Agreement with UPRR to provide compensable interest for the removal of Bridge #3, the proposed action is to construct a vehicular bridge at the former UPRR Bridge #3 site.

b. Authority and Purpose

The Guadalupe River Project was authorized by Congress in 1986 to provide flood protection and amended in 1990 and 1991 to add additional environmental protection and include features for recreation. Construction of the Authorized Project began in 1992 after conditional State water quality certification was obtained, as required under Section 401 of the Clean Water Act (CWA). A condition of the 1992 water quality certification required that a Mitigation and Monitoring Plan (MMP) be developed for the Authorized Project. A June 1992 MMP specified protective and mitigation measures for riparian vegetation, fish spawning gravel, fish passage, and thermal impacts. Installation of these measures began in 1994 and has continued in cooperation with relevant resource agencies under current clearances and permits. The project was designed to avoid, minimize, or mitigate adverse project effects on fish and wildlife habitat for Federally and State-listed threatened and endangered species.

d. General Description and Quantity of Dredged or Fill Material

(1) General Characteristics of Material

(2) Source of Material

Fill materials would come from a permitted offsite commercial borrow site.

If a borrow site is selected that has not been evaluated in this document, the contractor would be responsible for providing all applicable NEPA, CEQA, and other appropriate environmental compliance.

e.. Description of the Proposed Discharge Site(s)

(1) Location (map)

See project area and vicinity map, Plate 1 of the EA.

(2) Size (acres)

- Approximately 170 cubic yards (CY) of wet excavate is needed for constructing center two piers and 210 CY of dry excavation for the abutments (see area of placement of rock previously shown in Plate 2). Standard riprap gradation is placed for bank slopes up to 2-horizontal to 1 vertical. If necessary, larger stones would be required on steeper slopes.
- On both the east and west banks, the total amount excavate for riprap is 641.2 cubic yards. On both sides of the river, the total amount of rock riprap needed as fill to cover an area under the bridge is 1,174 tons encompassing a total area of 8,000 square feet (see area riprapped in Plate 2). The diameter size of the riprap varies between 3.6 inches and 9 inches, while the thickness of the rock riprap ranges between 12 inches minimum to 15 inches maximum. A filter bedding with the gradation would be used. The filter grading is based on a layer thickness of 6 to 9-inches and would be checked for adequate protection against piping of the existing parent soil material into the riprap layer. Fill dirt would be placed on top of the rock riprap and hydro-seeded in the fall/spring with native or native hybrid grasses and forbs to minimize the effects to the channel.
- Approximately 230 CY of backfill would be needed for the area under the bridge.

(3) Type of Site (confined, unconfined, open water)

The site is within the confined reach of the Guadalupe River channel in San Jose, CA. All work would occur within the wet and dry portions of the channel between June 1 and October 15.

(4) Type(s) of Habitat

The construction of the vehicular bridge would occur in the aquatic area and 0.18 acre of riparian habitat.

(5) Timing and Duration of Discharge

Discharge activities would occur between June 1 and October 15 and to be consistent with resource agency approval.

f. Description of Disposal Method (hydraulic, drag line, etc.)

Smaller heavy equipment would be used for this project including smaller models of cranes, graders, excavators, backhoe, pavers, and rollers, and would take approximately 150 days to complete (starting in September 2008 and seeding activities extending into September/October only if seeding conditions are not conducive and cannot be completed in the Fall of 2008).

II. Factual Determinations (Section 230.11)

a. Physical Substrate Determinations (consider items in Section 230.11(a) and 230.20 Substrate)

(1) Substrate Elevation and Slope

Approximately 70 feet NGVD on a 2:1 average bank slope.

(2) Sediment Type

Clays and silts compose the river bank material to be affected.

(3) Dredged/ Fill Material Movement

Fill material would not be expected to be subject to movement. Movement would only occur if high velocities undermine the supporting substrate materials.

(4) Physical Effects on Benthos (burial, changes in sediment type, etc.)

The proposed project would have a physical effect on benthos during the construction of the coffer dam and the two bridge pier bents.

(5) Other Effects

No other effects are anticipated.

(6) Actions Taken to Minimize Impacts (Subpart H)

There is a firm environmental commitment for the mandatory use of approved Best Management Practices (BMP's) that requires and allows the Contractor to reduce turbidity and

completely prevent materials from falling into the river during all phases of constructing the vehicular bridge that would avoid significant adverse effects to water quality.

b. Water Circulation, Fluctuation, and Salinity Determinations

(1) Water (refer to section 230.11(b), 230.22 Water, and 230.25 Salinity Gradients; test specified in subpart G may be required). Consider effects on:

(a) Salinity.

The fill occurring in the Guadalupe River as part of this proposed project is subject to inundation (i.e. above the mean summer water line). When the area receives water, it is from rain or flood events. All waters affected are freshwater and therefore, filling these areas would not adversely affect salinity.

(b) Water Chemistry (pH, etc.)

The fill area is in the channel in the area above and below the mean summer water line. Materials would be tested for pH prior to placement as not to affect water chemistry.

(c) Clarity

Fill would occur in areas above and below the mean summer water line. During filling operations, the Corps would adhere to turbidity and water chemistry requirements associated with the Corps 401 water quality permit. Turbidity would occur during de-watering and the construction of the temporary coffer dam and no other turbidity is expected to occur since all fill will occur out of the water.

(d) Color

The proposed project is not expected to affect color.

(e) Odor

The proposed project is not expected to affect odor.

(f) Taste

The proposed project is not expected to affect taste.

(g) Dissolved Gas Level

The proposed project is not expect to effect dissolved gas levels since all placement would occur in the dry de-watered portion of the channel.

(h) Nutrients

The proposed project components would adversely affect nutrients in the water since SRA vegetation will not be allowed in this section of the river.

(i) Eutrophication

The proposed project is not expected to effect eutrophication since all fill activities would occur in the dry, de-watered portion of the channel.

(j) Others as Appropriate

The proposed project is not expected to affect other water characteristics.

(2) Current Patterns and Circulation (consider items in Section 230.11(b), and 230.23), Current Flow and Water Circulation

(a) Current Patterns and Flow

The proposed fill areas would affect general current and flow patterns during de-watering and after the temporary coffer dams and two piers are constructed. However, the pier bents have been designed to reflect debris away from them.

(b) Velocity

The proposed fill areas would affect general current and flow patterns by having the two piers slow it down, but not significantly affect the hydraulics.

The velocities of stormwater runoff and the velocities during flood events are not expected to change with the project.

(c) Stratification

The proposed project is not expected to significantly affect stratification.

(d) Hydrologic Regime

The hydrologic regime of the stormwater runoff is not expected to change with the proposed project.

(3) Normal Water level Fluctuations (tides, river stage, etc.) (consider items in Sections 230.11(b) and 230.24)

Normal water fluctuations would not be affected. The project would not effect stage elevations greater than 0.01 foot as currently modeled.

(4) Salinity Gradients (consider items in section 230.11(b) and 230.25)

Since the fill areas receive freshwater stormwater runoff, salinity gradients would not be affected.

(5) Actions That Will Be Taken to Minimize Impacts (refer to Subpart H)

Effects to pattern or flow of stormwater runoff are not expected to be significant. Therefore, no additional minimization measures are needed that are not already defined in Subpart H.

e. Suspended Particulate/ Turbidity Determinations

(1) Expected Changes in Suspended Particulates and Turbidity Levels in Vicinity of Disposal Site (consider items in section 230.11(c) and 230.21)

Temporary effects to turbidity are expected to occur since it is necessary to de-water a section of the wetted channel to construct a temporary coffer dam.

(2) Effects (degree and duration) on Chemical and Physical Properties of the water Column (consider environmental values in Section 230.21, as appropriate)

(a) Light Penetration

There would be some effects to light penetration from the bridge suspended over the channel.

(b) Dissolved Oxygen

There would be no adverse effects to dissolved oxygen due to the project.

(c) Toxic Metals and Organics

Due to the inertness of the fill materials, there would be no exchange of constituents between the fill and aquatic systems. Some leaching of petroleum and other products would occur during high flows when the area is inundated. However this would be undetectable and masked by the urban runoff from the asphalt street surrounding the watershed. Measures described in the SWPPP, prepared to RWQCB guidelines, and draft EA/IS, would minimize the potential for contaminants to be introduced into the fill areas.

(d) Pathogens

The proposed project would not introduce pathogens to the aquatic community.

(e) Esthetics

There would be esthetic effects during construction (construction equipment and general disturbance) but the effects would not be considered significant.

(f) Others as Appropriate

There would be no other significant adverse effects to the chemical and physical properties of the water column.

(3) Effects on Biota (consider environmental values in Section 230.21, as appropriate)

(a) Primary Production, Photosynthesis

The project would affect primary production and photosynthesis in those areas filled for approximately 2-3 years. However, the effect would be less than significant.

(b) Suspension/ Filter Feeders

The project would have an effect on suspension and filter feeders since de-watering the channel and construction of the coffer dam would occur in the channel.

(c) Sight Feeders

The project would have no effect on sight feeders since none would occur in the area during the filling action

(4) Actions Taken to Minimize Impacts (Subpart H)

During construction, the Corps would require the Contractor to prevent all construction pollutants from contacting storm water and eliminate or reduce non-storm water discharges to either the storm sewer system or off-site waters. The BMP's would be appropriate for the site characteristics. The BMP's would be adequate to control erosion, trap sediment, and prevent any possible pollutant from entering receiving waters. Within the channel, BMP's would consist of soil stabilization practices including hydroseeding and slope stabilization using at least one or more of the following techniques: silt fence, wood retaining walls, fiber rolls, gradual sloped landings, and straw wattles. Exposed soils within the newly constructed channel would be fully stabilized prior to the rainy season when this is the period when river flows reach the higher elevations of the channel where the trail is located. These practices are required to be implemented by the Contractor to contain the amount of soil (sediment) that is removed from the trail construction site to completely avoid any potential adverse effects from surface storm water runoff or dirt pushed down slope towards the river.

d. Contaminant Determinations (consider items in Section 230.11(d))

The proposed project would not add contaminants to any nearby body of water. Best management practices to reduce the potential of accidental spills during construction are

included in the EA. The fill material for the sites would not be contaminated and would be tested for contaminants prior to placement.

e. Aquatic Ecosystem and Organism Determinations (use evaluation and testing Procedures in Subpart G, as appropriate)

(1) Effects on Plankton

Effects to zooplankton would be occur for a period of 5 months when the channel is de-watered for excavation, filling, and construction of the two pier bents. With the use of best management practices consisting of the construction of a coffer dam, the effects are not considered significant. No additional measures to minimize effects are needed for fill occurring in the area.

(2) Effects on Benthos

Effects to the benthos would be temporary and not significant, no additional measures to minimize effects beyond the construction of a coffer dam are needed during de-watering, excavation, and filling in the area.

(3) Effects on Nekton

Effects to nekton would be temporary and not significant. With the use of best management practices, no additional measures to minimize effects are needed for de-watering, excavation and filling in the area.

(4) Effects on aquatic Food Web (refer to Section 230.31)

There would be no adverse effects to the aquatic food web, or the plankton, benthic and nekton communities with the proposed project

(5) Effects on Special Aquatic Sites (discuss only those found in project area or disposal site)

(a) Sanctuaries and Refuges (refer to section 230.40)

There would be no adverse effects to sanctuaries or refuges with the proposed project.

(b) Wetlands (refer to section 230.41)

No wetlands would be filled.

(c) Mud Flats (refer to Section 230.42)

There would be no adverse effects to mud flats with the proposed project.

(d) Vegetated Shallows (refer to Section 230.43)

There would be adverse effects to vegetated shallows during de-watering, excavation, and filling within the proposed project area.

(e) Coral Reefs (refer to Section 230.44)

There would be no adverse effects to coral reefs with the proposed project.

(f) Riffle and Pool Complexes (refer to section 230.45)

There would be no adverse effects to riffle, but there are adverse effects to a pool complex. De-watering would be restricted to a short period with the construction of a coffer dam as a best management practice to continue flowing water around the work in the channel.

(6) Threatened and Endangered Species (refer to Section 230.30)

Adverse effects to critical habitat for threatened and endangered species would occur. Work would occur in acceptable work windows for listed fish species and the remainder of the work on dry sections of the channel during the summer and fall months.

(7) Other Wildlife (refer to Section 230.32)

Wildlife effects associated with the construction are expected to be temporary. Generally, wildlife species that use the areas around project area are mobile species that would leave the area during construction and return when construction is completed. Therefore, the proposed project would not have any significant adverse effects to wildlife over what was described in the Environmental Assessment.

(8) Actions to Minimize Impacts (refer to Subpart H)

There would be no additional significant adverse effects to wildlife due to the construction. Therefore, there would be no minimization measures needed.

f. Proposed Disposal Site Determinations

(1) Mixing Zone Determination (consider factors in section 230.11(f)(2))

Not applicable.

(2) Determination of Compliance with Applicable Water Quality Standards
(present the standards and rationale for compliance or non-compliance with each standard)

No water quality or effluent standards would be violated either during or after construction of the dike or the road raising.

(3) Potential Effects on Human Use Characteristics

The proposed project would not have any significant adverse effects to municipal and private water supply, recreational and commercial fisheries, or water-related recreation. There would be no national and historic monuments, parks, seashores, wilderness areas, research sites or similar preserves affected by the proposed project.

g. Determination of Cumulative Effects on the Aquatic Ecosystem (consider requirements in Section 230.11(g))

h. Determination of Secondary Effects on the Aquatic Ecosystem (consider requirements in Section 230.11(h))

III. Findings of Compliance or Non-Compliance With the Restrictions on Discharge

a. Adaptation of the Section 404(b)(1) Guidelines to this Evaluation

No significant adaptations of the guidelines were made relative to this evaluation.

b. Evaluation of Availability of Practicable Alternatives to the Proposed Discharge Site Which Would Have Less Impact on the Aquatic Ecosystem There were no alternatives identified that would have significantly less adverse effects on the aquatic ecosystem than the proposed alternative.

IV. Summary

c. Compliance with Applicable State Water Quality Standards and

d. Compliance with Applicable Toxic Effluent Standard or Prohibition Under Section 307 of the Clean Water Act

State water quality standards would not be violated. The proposed action would not violate the Toxic Effluent Standards of Section 307 of the Clean Water Act.

e. Compliance with Endangered Species Act (ESA) of 1973

One threatened and endangered species would be affected by the proposed project, the steelhead.

f. Compliance with Specified Protection Measures for Marine Sanctuaries Designated by the Marine Protection, Research, and Sanctuaries Act of 1972

Not applicable.

g. Evaluation of Extent of Degradation of the Waters of the United States

(1) Significant Adverse Effects on Human Health and Welfare

The proposed project would not cause significant adverse effect on human health and welfare, including municipal and private water supplies, recreation and commercial fishing. Temporary effects to esthetics would occur during construction.

h. Appropriate and Practicable Steps Taken to Minimize Potential Adverse Impacts of the Discharge on the Aquatic Ecosystem

i. On the Basis of the Guidelines, the Proposed Disposal Site(s) for the discharge of fill material complies with the requirements of these guidelines.

Appropriate and practicable steps to minimize potential adverse effects of discharge and fill on the aquatic ecosystem include: placing fill material only where it is needed for the proposed project and confining it to the smallest practicable area. The areas disturbed by construction would be returned as close as possible to pre-project conditions where practicable.

On the basis of the guidelines, the proposed project is specified as complying with the inclusion of appropriate and practical conditions to minimize pollution or adverse effect on the aquatic ecosystem.

Appendix B

U.S. Fish and Wildlife Service Coordination Act Report



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846



In reply refer to:

SEP 18 2006

Colonel Ronald N. Light
District Engineer
Corps of Engineers, Sacramento District
1325 J Street
Sacramento, California 95825-2922

Dear Colonel Light:

Pursuant to our FY 2006 Scope of Work, this letter constitutes the Fish and Wildlife Service's (Service) supplemental Fish and Wildlife Coordination Act (FWCA) report for proposed modifications of the Corps of Engineers' (Corps) Guadalupe River Flood Control Project, Lower Reaches (Downtown Project). Information considered in this FWCA report includes our review of Service files, including meeting notes, photographs, and previous environmental documents for the Downtown Project. Other information provided by the Corps which we considered in this report are an administrative draft Environmental Assessment and design drawings received June 18, 2006, 90% Plans and Specifications dated June 29, 2006, and a Biological Assessment (BA) dated June 28, 2006. We also conducted a site visit on June 20, 2006, and discussed the proposed modifications with representatives of the Corps, Santa Clara Valley Water District (SCVWD), San Jose Redevelopment Agency (SJRA), National Marine Fisheries Service (NMFS), California Department of Fish and Game (CDFG) and Regional Water Quality Control Board (RWQCB).

INTRODUCTION

The Downtown Project primarily involves flood control work in the section of the Guadalupe River between Grant Street and I-880 in downtown San Jose, and consists of three segments or "contracts." The final project design and mitigation (i.e., without the proposed modifications) are as described in the Final General Re-evaluation Report (GRR) and Environmental Report for Proposed Project Modifications, dated February 2001 (Corps and SCVWD 2001). The GRR modified the project design and mitigation from that shown in previous documents, including the 1991 General Design Memorandum (GDM) (Corps 1991) and 1985 Feasibility Report/Environmental Impact Statement (FS/EIR) (Corps 1985). At the time the GRR was issued, Contracts 1 and 2 had been completed. The major design change presented in the GRR was the proposed construction of a covered bypass within Contract 3 from approximately Santa Clara Street to Coleman Avenue. The purpose of this change was to protect high value riparian habitat, and reduce the amount of river bank and channel bed armoring, as indicated in the GRR and Record of Decision dated November 19, 2001. The GRR also adopted a new Mitigation and

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Monitoring Plan (MMP) that included additional on-site and off-site mitigation needed to compensate project impacts to shaded riverine aquatic cover (SRA cover) habitat. The project impacts and mitigation benefits to SRA cover were analyzed in a Habitat Evaluation Procedures study (JSA 2001).

Agreement on the project design and mitigation plan has been recorded in a Dispute Resolution Memorandum (DRM) and Supplement to DRM dated September 9, 1998, and April 14, 1999, respectively, and signed by the Service, NMFS, CDFG, Corps, SCVWD, City of San Jose, Guadalupe-Coyote Resource Conservation District, and others (Guadalupe River Collaborative). The purposes of this DRM and Supplement were to resolve issues and avoid litigation raised over concerns about the adequacy of the mitigation plan, which had been raised in Notices of Intent to Sue under the Clean Water Act filed by private environmental interests. This agreement was achieved through an alternative dispute resolution process.

Among the permits and approvals for constructing the Downtown Project are Biological Opinions from the Service and NMFS, and a Water Quality Certification under section 401 of the Clean Water Act (Order # 01-036, California RWQCB, San Francisco Region, March 22, 2001). Therein, the Water Quality Certification (finding #15) states that the written approvals of the MMP included in the GRR by resource agencies, including the Service (letter dated March 5, 2001), meet the conditions of an earlier 1992 conditional certification, and that implementation of this plan is required (finding #16 and Provision 6b). Implementation of this monitoring plan is also required under non-discretionary Terms and Conditions 2A and 2D of NMFS' August 11, 2000, Biological Opinion. The Service participates as a member of the Adaptive Management Team (AMT) to annually review mitigation progress and performance for the Downtown Project, and attends regular meetings of the Guadalupe Watershed Integration Working Group (GWIWG) to discuss a variety of activities in the watershed.

The general locations of the flood control elements and on-site mitigation are shown in Figure 1. The Downtown Project has been substantially completed, with the exception of the removal and replacement of Union Pacific Railroad Bridge #4 (UPRR #4) with a double track bridge, and installation of SRA cover in-fill mitigation in project Segment 3A, primarily in the former locations of several other UPRR Bridges (#1, #2, and #3) and Old Julian Street Bridge (MMP Figure C-3 in Corps and SCVWD 2001). The total site length of this in-fill mitigation in Contract 3A is estimated to be 878 feet (Table C-1 in Corps and SCVWD 2001). JSA (2004, 2006) has specified the uncompleted mitigation site length to be 410 feet, but the Service cannot verify this estimate. Demolition of Union Pacific Railroad Bridge #3 (UPRR #3) was completed on June 8, 2004.

The fish and wildlife resources of the project area include a variety of native and non-native fishes, including small runs of steelhead trout, Chinook salmon, and Pacific lamprey. A narrow riparian corridor is present that provides shade and water temperature moderation, cover, and other wildlife values. Additional information on baseline quantities and project effects can be found in project documents (Corps 1985, Corps and SCVWD 2001).

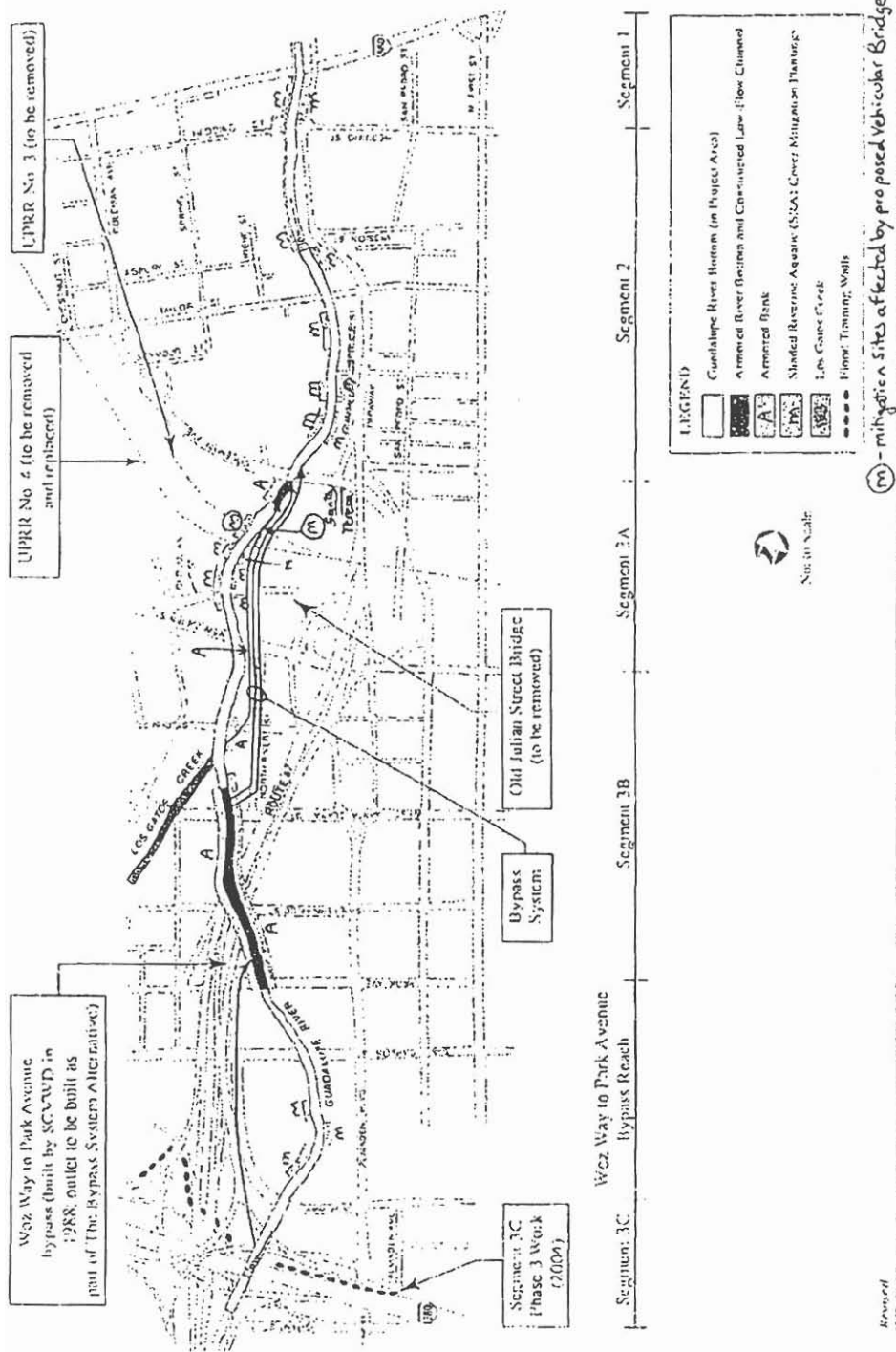


Figure 1. Guadalupe River Flood Control Project (Downtown Project). Slightly modified from GRR Figure 3.4.1 (Corps and SCVWD 2001). Only infill (on-site) SRA mitigation sites are shown. Not to scale and not all streets or other details shown.

PROPOSED MODIFICATIONS

The proposed changes considered in this supplemental FWCA report are located in the section of Contract 3 between New Julian Street and Coleman Avenue, specifically: (a) construction of a pedestrian and bicycle path undercrossing beneath the east bank of new UPRR #4, and (b) construction of a new vehicular bridge in the former location of UPRR #3. The pedestrian undercrossing would be built in conjunction with replacement of the existing UPRR #4 with a new bridge. The pedestrian undercrossing would enter the east bank of the flood channel (i.e., top of bank of the incised natural river channel) about 210 feet south of new UPRR #4, and exit the channel 150 feet to the north of the bridge. The path would be 8 feet wide, have retaining walls on both sides, and be covered by a protective overhang extending 30 feet on both sides of the bridge. The path slope and landings are designed to be compliant with the Americans with Disabilities Act (ADA). The purpose of the pedestrian undercrossing is to connect and complete a trail system for bikes and pedestrians without having to cross the railroad tracks, since an at-grade crossing was not approved at this location.

The new vehicular bridge would be a two-lane bridge with sidewalks on each side. The total width of the bridge would be about 50 feet. The bridge would have two piers and would be located about 20 feet north of the site of former UPRR #3. A new stormwater outfall would be constructed on the west bank north of the bridge. Riprap would be placed on both river banks and on the river invert below the bridge and around a new drainage outfall.

In its June 28, 2006, BA, the Corps states that UPRR wants to modify UPRR #3 for vehicles for maintenance and public use. Descriptions of the deficiencies in the currently designed maintenance road system, the deficiencies of existing public accesses to the site, or alternative accesses other than crossing the river, were not specified further in the BA. The Service visited the site area on June 20, 2006, and made several general observations. It is apparent that the former UPRR property on the west side of the river has been developed into retail establishments, but the property on the east side is undeveloped. The establishments on the west side will be accessible from both New Julian Street and Coleman Avenue via (new) Autumn Street, which is currently in a late stage of construction. The undeveloped and current UPRR property on the east side of the river is currently accessible from Coleman Avenue via Santa Teresa Street. The former location of UPRR #3 is about 0.13 mile south of Coleman Avenue, opposite the parking lot and facade of a "Target" retail store. The distance between New Julian Street and Coleman Avenue is about 0.37 mile.

A terrestrial planting plan consisting of trees, shrubs, hydroseeding, and an irrigation line, is planned for an area to the east of the top of bank for about 200 feet upstream and downstream of the new UPRR #4.

COORDINATION HISTORY

Pedestrian Undercrossing: With respect to the pedestrian undercrossing of UPRR #4, the Corps was informed by UPRR counsel's August 9, 2000, comments on the draft GRR that UPRR opposed at-grade crossing of its railways. The final GRR (dated February 2001), states that the

recreational trails would cross the railroad tracks either by a bridge or underground crossing. The GRR did not discuss or disclose any impacts which would have resulted from this crossing. The Service was contacted and we engaged in a series of meetings and site visits with the Corps, SJRA, and other interested parties between January and July of 2001 to reach consensus on how to proceed. Several designs for pedestrian paths on the east and west bank were reviewed. Relevant factors considered were the needs to comply with ADA requirements and other safety factors related to vertical clearance and width, and how to balance these factors against additional impacts on river channel riparian vegetation.

As a result of this coordination, a document entitled "Supplemental Description of the Recreational Trail Alignment for the Guadalupe River Flood Control Project between New Julian Street and Coleman Avenue" (final version dated July 16, 2001) was formulated by the Guadalupe River Collaborative that specified: (a) SJRA would seek California Public Utilities Commission (CPUC) approval for at-grade crossings on both east and west banks, (b) SJRA would seek letter and testimonial support for at-grade crossings from the resource agencies, and (c) descriptions of a below-grade undercrossing alternative that would be constructed if all reasonable efforts to attain at-grade approval failed, the impact areas of these undercrossings, and an additional mitigation area of 1.8 acres located top of bank to the west and south of UPRR #4. These descriptions and locations are based on design drawings dated April 24, 2001 (distributed at a May 10, 2001, meeting of the Guadalupe River Collaborative). The July 16, 2001, document was adopted by unanimous consent at a July 19, 2001, meeting. The Service submitted its letter of support of at-grade crossings to the CPUC on July 2, 2001.

SJRA reported to the Service around 2003 that the CPUC had approved one of two requested at-grade crossings (west bank), approximately parallel to new Autumn Street which, when completed, will span between Coleman Avenue and New Julian Street a short distance west of the river. The request for an at-grade crossing of the east bank was denied. In 2005, the Service reviewed a proposal for a temporary pedestrian undercrossing of existing UPRR #4 along the east bank. Our coordination letter, dated June 22, 2005, considered the temporary undercrossing to constitute a permanent impact because it would be replaced by a permanent trail when UPRR #4 is replaced with a new bridge. We recommended that the temporary undercrossing project proceed as planned without a specific mitigation requirement provided that the impacts of both temporary and permanent undercrossings are evaluated when the plans for the permanent undercrossing are drawn. The Service requested (and received) from SCVWD and SJRA, informal electronic mail (e-mail) notification of their commitment to the top of west bank riparian mitigation site prior to issuance of our coordination letter (e-mails dated June 14, 2005, from Al Gurevich, SCVWD, and Dennis Korabiak, SJRA).

Vehicular Bridge: Prior to the current proposed modification of the site of former UPRR #3, the 1991 GDM included an Environmental Assessment which modified the bridge relocations originally specified in the 1985 FR/EIS (Corps 1985, 1991). According to the GDM, all four of the existing bridges would be demolished, and a single, two track bridge would be built in the location of UPRR #4. The GDM states that the plan to replace only UPRR Bridge #4 resulted from the Corps' coordination with UPRR. An accompanying Compensable Interest Report (Exhibit 4 in Corps 1991) indicates that a double track bridge would allow elimination of one of

the two active railroad bridges (#3 or #4). The plan to eliminate UPRR #3 and replace UPRR #4 with a double track bridge is re-stated without modification in the 2001 GRR.

UPRR's counsel did not mention UPRR #3 in its August 9, 2000, comment on the draft GRR, but did indicate its opposition to removing the bridge in a May 29, 2001, letter on the final GRR. Therein, the letter states that removal of the bridge could "affect the developability of that property." Although UPRR counsel's letter states that its comments are similar to previous comments, the Service has no record of any prior objection to removal of UPRR #3. We note that a May 19, 1998, UPRR letter (Robert Krantz, UPRR to Ralph Qualls, City of San Jose) discusses UPRR #4 construction and UPRR #3 demolition sequencing in light of expected development, but does not request retention of UPRR #3. At a June 6, 2001, teleconference of the Guadalupe River Collaborative (including the Corps, Service, SCVWD, and SJRA), the May 29, 2001, comments and other comments on the final GRR were reviewed. Records from that meeting indicate the Corps stated that no plans had been submitted or permits issued in relation to changing the status of UPRR #3, and SJRA would engage in discussions with UPRR about removal of UPRR #3 in the broader context of a regional plan. On June 27, 2001, the Corps submitted the 90% Plans and Specifications for Contract 3A to the Service for review; this document did not detail railroad bridge removals or replacements other than a notation outside the work limits that UPRR #3 would be removed and the riverbank restored to original grade (Sheet Reference #C-38). The matter was not discussed at any subsequent meeting of the Guadalupe River Collaborative, GWIWG, or AMT until early 2006.

At a January 11, 2006, GWIWG meeting, the Corps stated that, contrary to the GRR design, it had made a previously undisclosed arrangement with UPRR to construct a new vehicular bridge for cars in the former location of UPRR #3. The proposed vehicular bridge would be separate from and in addition to the double track bridge at the location of UPRR #4. The Corps' June 28, 2006, BA makes reference to a Corps determination that UPRR had a compensable interest in a new vehicle bridge, and a Memorandum of Agreement (MOA) between the Corps and UPRR dated April 23, 2003. The Service has made repeated requests for documentation relating to UPRR #3, including any revised Compensable Interest Report, the Corps' response to UPRR's comments on the final GRR, the April 23, 2003, MOA, and the previous MOA dated September 30, 1996. On August 4, 2006, the Corps provided the April 23, 2003, MOA.

FUTURE WITH AND WITHOUT THE PROJECT

Pedestrian Undercrossing: The design of the pedestrian undercrossing in the BA appears to be in the same location as the design which the Service had coordinated with the Guadalupe River Collaborative in 2001 (see above). The BA provides additional detail about retaining walls needed on both sides of the path, as well as a protective cover overhanging the trail which would extend 30 feet upstream and downstream of UPRR #4. According to the July 16, 2001, supplemental description, the area of disturbance would be 0.17 acre of which no more than 0.11 acre would be hardscape in the form of paths, retaining walls, or buried footings. This is similar to the 3,812 square feet (about 0.1 acre) of the footprint of the path stated in the BA.

The actual extent of loss of riparian trees within the work limits is not known. The supplemental description specifies that a "small number" of riparian shrubs or young trees would likely be removed.

Thus, the future with the pedestrian path would have an incremental addition of hardscape features on the middle and upper bank of the river channel at the expense of riparian vegetation in the vicinity of UPRR #4. The effect on SRA cover is likely to be small because the trail is set back slightly away from the river edge and most shade over the river is derived from trees close to the river edge. Additionally, the portion of the path which is closest to the river is also nearest to the bridge, and within a maintenance zone area where some vegetation pruning and debris removal would occur as necessary. There would likely be some modest amount of additional maintenance to keep the path clear of vegetation that may interfere with path use, and to remove debris which may catch on the overhang or guardrails.

Without the pedestrian path, the current riparian vegetation conditions would remain largely unchanged. Some maintenance of vegetation would still occur in the region close to the new bridge, whether or not a path is installed. Without the pedestrian path, there would be slightly more riparian vegetation and less hardscape within the channel and beneath the bridge.

Vehicular Bridge: Construction of a vehicular bridge would involve a near complete loss of all habitat value within the bridge footprint as well as substantial impact in any maintenance zone upstream and downstream of the bridge, sometimes referred to as a "clear zone." Activities in the clear zone may involve limiting the size of woody vegetation by pruning, removal of woody debris, or other actions. The BA does not describe a clear zone or what activities would be conducted within it, but they are expected to be similar to what has been assumed for other bridges in the project area, i.e., maintenance within about 50 feet upstream and downstream of a bridge.

The loss of habitat value can only be approximated for several reasons. First, the 2001 HEP (JSA 2001) evaluated the combined impact of all project features and mitigation areas as a whole (i.e., on-site, Guadalupe Creek, Reach A), not values associated with particular lengths or sites. In addition, the effect of the vehicular bridge is the sum of both impacts within the boundaries of the site, as well as the cumulative effect that it contributes to lost shade and hence temperature affects downstream.

Habitat value is calculated as a product of the area and a habitat suitability index for each evaluation species, averaged over time (Average Annualized Habitat Unit, or AAHU). The area affected by the vehicular bridge would be about 0.10 acres of SRA cover habitat, assuming a 30 foot stream width and 150 foot site length, where 150 equals the sum of the 50 foot bridge width, plus the 50 foot upstream and downstream maintenance zone. Because the site of the proposed vehicular bridge coincides with a mitigation site, the without-project condition of that site should be its future with the mitigation installed. As a very conservative estimate of this condition, we apply the baseline Habitat Suitability Indices (HSIs) of 0.67, 0.87, and 0.36, for the HSI models for rainbow trout, non-salmonid guild, and belted kingfisher, respectively, yielding 0.07, 0.09, and 0.04 AAHUs of habitat value represented by the area affected by the vehicular bridge.

A second rough estimate of the habitat value effect of the vehicular bridge on the mitigation site is to assume the value of the affected site is roughly proportionate to its contribution, in linear feet, to all on-site mitigation. The "triple bypass system" in JSA (2001) is most similar to the action evaluated in the GRR. For similar bypass alternatives, about 0.45 AAHUs of rainbow trout value is estimated to be accrued by all on-site mitigation (June 3, 1998, memorandum from Karen Leone, Jones and Stokes Associates, entitled Comparison of Alternatives 1 and 2, Impacts, Mitigations, and Costs). We estimate that at least 10% (0.05 AAHUs) of on-site mitigation value would be foregone if the roughly 300 feet of bank in the vicinity of UPRR #3 were not replanted at the expense of a vehicular bridge (i.e., $10\% = 300 \text{ feet} / 3,000 \text{ feet} \times 100$; 300 feet equals the sum of the 50 foot bridge width, plus the 50 foot upstream and downstream maintenance zone on both sides of the river; 3,000 linear feet is the total on-site mitigation in Table C-1 in Corps and SCVWD 2001 Volume 2B). The impacts of the vehicular bridge fall entirely within mitigation sites 3A-6 and 3A-9. A modest amount of shade may be provided by the bridge structure itself, but more significant adverse effects would occur due to losses of shade in the maintenance zone, and losses of vegetation, in-water structure, natural banks, and other habitat features in both the maintenance zone and bridge footprint. It is important to emphasize that this 10% habitat value loss estimate is only the loss of mitigation benefits over baseline conditions. This does not include any reduction in value relative to the baseline due to hardscaping or maintenance. An additional increment of loss in baseline value would occur in about a 300 foot length (both banks) within and around the proposed vehicular, in the bridge footprint of 50 feet, plus maintenance zones extending about 50 feet upstream and downstream, $\times 2$ (left and right bank).

Overall, the future without the vehicular bridge would have locally enhanced riparian vegetation and SRA cover, and significantly increased continuity of cover within the project reaches and particularly between Coleman Avenue and New Julian Street, where infill mitigation sites are planned for the former sites of both Old Julian Street and UPRR #3 (Figure 1). Thermal benefits of SRA cover within and downstream of the site would be maximized. Without the vehicular bridge, these infill mitigation sites would be planted, monitored, and maintained in perpetuity.

With the vehicular bridge, the mitigation sites 3A-6 and 3A-9 would be greatly reduced, from 373 feet to around 73 feet. Construction of the bridge, placement of riprap, and maintenance zones upstream and downstream of the bridge would result in a complete or nearly complete loss of habitat value. The risk or impingement of debris, and associated effects and maintenance, will increase due to the additional piling structures of the vehicular bridge. A small amount of complete shade would be provided by the bridge structure, but this would not be equivalent to the shade and other natural features provided by mitigation. The natural features lost would include, for example, structural habitat provided by branches or roots which extend near or into the water, food support provided by leaves and insects derived from natural vegetation, perch sites for birds, and other ecological functions as well as shade. The riprap placed beneath the bridge on the site would not be suitable for salmonid spawning.

DISCUSSION

Pedestrian Undercrossing: The impact of the proposed pedestrian undercrossing and associated features (retaining wall, overhang) is substantially the same as was described in the July 16, 2001, supplemental description and would have similar impacts. These impacts include permanent losses due to hardscape, and temporary losses due to construction access, grading, and maintenance. Although a terrestrial planting plan is provided in the BA, this is not the same location or size as the 1.8 acres of riparian plantings previously described in the supplemental description. These east bank plantings are ornamental, irrigated, and not intended to substitute as mitigation for the project (personal communication, Mario Parker, Sacramento District, August 7, 2006).

We note no reference in the BA or other recent information provided by the Corps as to the disposition of the 1.8 acre west bank site. Accordingly, the mitigation for the pedestrian undercrossing as described in the BA is not adequate. We recommend the Corps develop plans for riparian restoration on the west bank site and submit these to the Service for review. If these are substantially in conformity with the supplemental description, the Service will likely recommend that the Corps proceed with construction of the pedestrian undercrossing. We note that, while the 1.8 acre site was intended to mitigate the effects of two undercrossings, the west bank undercrossing is not now needed. Of the two undercrossings, however, it is the east bank undercrossing which is still proposed that would have constructed the majority of the hardscape within the riparian area (0.17 of 0.18 acres). For this reason, there is no need to reduce the size of the mitigation site from the 1.8 acres previously discussed.

Vehicular Bridge: Construction of a vehicular bridge in the former location of UPRR #3 would result in the loss of SRA cover mitigation site length and value of about 300 feet of the total 3,000 feet (10%) of the on-site (infill) mitigation specified for the project (Table C-1 in Corps and SCVWD 2001 Volume 2B). This impact would add to the already significant losses of SRA cover in this reach. Substantial losses of SRA cover have occurred with the project as currently proposed, an estimated 3,861 linear feet (Table 5.4-4 in Corps and SCVWD 2001). Included in this estimate are permanent losses of SRA cover in the vicinity of UPRR #3, along the entire length both banks downstream of the bypass outfall to Coleman Avenue (at least 600 feet, see Figure A-1 page 12 of 27 in JSA 2006). These permanent losses were necessary to accommodate the hydraulic needs of the bypass confluence. Despite these impacts, the flood control bypass provides the capacity to allow vegetation to be preserved and enhanced in the natural channel. Providing this capacity and achieving this avoidance of impact is the primary purpose of the redesign and construction of the flood control project. The construction of a vehicular bridge at the former location of UPRR #3 does not take full advantage of this allowance.

The Corps has not proposed any alternative locations for mitigation of SRA cover losses to replace the reduction in on-site mitigation as a result of the vehicular bridge. During the long negotiation and collaboration needed to achieve the 2001 DRM agreement on the Downtown Project, the Service has consistently recommended that the Corps fully exhaust all on-site mitigation opportunities before considering mitigation off-site. The locations of several of the larger infill sites are in former locations of bridges such as Old Julian Street, UPRR #3, and

Hobson Street. Removal of hardscape and provision of SRA cover at these sites would result in relatively high habitat values credited per unit length. In addition, mitigation on-site limits the adverse effects of the project on salmonids, which are subject to stress in the downtown area due to higher ambient temperatures in the early fall and late spring.

The infill sites and the restoration of the bridge sites in particular, were major considerations in obtaining the Service's approval of the mitigation plan for the Downtown Project. The essential qualities of mitigation in the former bridge sites are that they reduce hardscape while improving habitat value and continuity nearest to the impact location. The Service does not consider it appropriate to substitute infill sites such as minor areas of unvegetated bank which were not identified in the MMR. Although we have not identified any such sites, some very minor variation in bank stability has occurred and is normal. Because the current project already includes all on-site opportunities, there is no other location that would provide the same benefits as the infill site at former UPRR #3. There is no other bridge that is a candidate for removal in Contract 3. St. John's Street was previously slated for removal in the 1991 GDM, but is described as retained in the GRR. The potential for providing SRA cover mitigation at St. John's Street if it were removed has not been studied. The capability to remove this bridge and install mitigation there could be affected by existing infrastructure, including one of the bypass inlets immediately upstream of it, and site hydraulics.

The Service also does not consider off-site mitigation to be appropriate for the proposed action for several reasons. Foremost, the Downtown Project has caused substantial impacts in this area and especially in Contract 3 due to extensive bank and bed armoring treatments in this reach (Figure 1). These impacts have caused nearly complete losses of SRA cover in the affected sections, which formerly supported native resident and anadromous fish, including the federally listed steelhead trout, as well as a variety of wildlife species. As a result, a significant portion of the habitat value loss of the Downtown Project, without the vehicular bridge, must already be mitigated off-site in areas downstream (Reach A), and upstream (Guadalupe Creek). When originally conceived, there was an expectation that Guadalupe Creek could generate SRA cover habitat values beyond that needed by the Downtown Project. A provision was included in the DRM and Supplement to allow the development and implementation of an accounting system which would "....track the benefits of such mitigation measures and will provide that benefits of the requirements of *this* project can be credited by appropriate agencies for the use by SCVWD on *other* projects and activities (DRM paragraph III.4., p. 85, Draft Record Document, September 8, 1998, underline and italics added for emphasis). This provision was needed because thermal modeling had shown that the entire Guadalupe Creek mitigation site would need to be restored in order for it to be cool enough to provide any incremental values to anadromous fishes. However, it was never intended that Guadalupe Creek credits be used to allow additional increments of impact of the project itself and/or elimination of elements of on-site mitigation. According to the DRM, all mitigation is to be implemented, and any identified credit is to be used for other projects, by SCVWD, not to justify additional impacts of the Downtown Project, by the Corps.

The Service's preferred method of mitigation of avoidance under our Mitigation Policy (46 FR 7656) is applicable to the proposed vehicular bridge. Avoidance in this case is achieved by not constructing the vehicular bridge at all. In order to implement this recommendation, we

emphasize that the Downtown Project has been constructed under permits and authorities that require that specific mitigation be provided at the proposed locations. The Corps disclosed in its environmental documentation that UPRR #3 would be removed and replaced with infill mitigation. The impacts of the flood control project have since fully occurred, and UPRR #3 demolished, under these permits. The fact that the Corps may have negotiated a conflicting arrangement with UPRR was not disclosed. Implementation of any and all actions should not modify the Corps' agreement to implement the design and mitigation plan nor obligations under the NMFS Biological Opinion and RWQCB Water Quality Certification. We believe these obligations can only be modified by those permitting agencies.

As a corollary to avoidance (in this case, of both impact and loss of mitigation value), the Corps and/or SJRA should fully examine alternatives which would achieve the purpose intended by the vehicular bridge, but would not cause impacts on habitat nor conflict with the Downtown Project as currently designed. This could include study of developing or improving access to streets to the north, south, and east, other traffic management actions or devices, and the no action alternative.

Additionally, we note that over 2 years have elapsed since demolition of UPRR #3 without any indication of progress in the planning and installation of SRA cover mitigation at the former location of this bridge. In accordance with Provision 6b of RWQCB Order 01-036 (Mitigation Plan Implementation and Downtown Project Construction Sequencing), the Corps is required to complete SRA cover mitigation infill plantings in Contract 3A not later than the planting season immediately following completion of flood protection work in Contract 3A. As noted above, UPRR #4 has not yet been replaced and this replaced bridge may be construed to have some flood protection function (greater freeboard, reduced debris impingement). We believe the intent of this sequencing is to ensure that the mitigation would be completed in a timely fashion, without creating conflict with other Corps activities. However, the Service is now concerned that the Corps may cite its delay in replacement of UPRR #4 as a reason to also delay timely completion of the SRA cover infill mitigation.

The clear guidance in our Mitigation Policy (46 FR 7660, paragraph 6), where Federal agencies have not carried out those agreed upon mitigation means and measures, is to request that agency to initiate corrective action. Accordingly, we recommend that the Corps proceed with the design and installation of the infill mitigation in the vicinity of former UPRR #3 as described in the GRR, and take necessary actions to ensure this mitigation is protected in perpetuity. If deemed necessary to replace UPRR #4 in advance of completing the infill mitigation, we recommend the Corps proceed with this replacement and provide the Service with a schedule for bridge replacement and mitigation installation.

The Service recommends against modification of the project such that a vehicular bridge would be constructed at the former location of UPRR #3. We recognize and support the original provisions in the current Biological Opinion (NMFS) and Water Quality Certification as they relate to the infill mitigation sites in the vicinity of UPRR #3. Similarly, we recommend against issuance of a 404 permit by the Corps or streambed alteration agreement by CDFG that would allow for construction of a vehicular bridge at the former UPRR #3 location or similar location.

We believe such allowance would also result in the inability to meet mitigation as identified in the design and mitigation plan and obligations associated with NMFS' Biological Opinion and RWQCB Water Quality Certification.

We note that infill mitigation at the site of the (former) Old Julian Street Bridge has also not been installed. The Corps should expeditiously plan, install, and protect in perpetuity the infill mitigation described in the GRR for this and any other uncompleted infill mitigation. We also recommend the Corps prepare and submit to the Service and other resource agencies, a current account of the completion status of all infill mitigation sites for the Downtown Project.

CONCLUSION

The Service supports and recommends construction of the east bank pedestrian undercrossing at new UPRR #4, if done with the inclusion of the 1.8 acre top-of-west bank riparian restoration area previously described in the July 16, 2001, supplemental description. The Service recommends against construction of a vehicular bridge at the former location of UPRR #3, which is an SRA cover infill mitigation site for the Downtown Project. The Service finds the proposed vehicular bridge to be inconsistent with the purpose of the redesigned Downtown Project to avoid impacts to high value riparian and SRA cover in the bypass section.

RECOMMENDATIONS

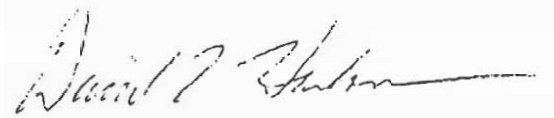
We recommend the Corps:

1. Construct the east bank pedestrian undercrossing of UPRR #4, provided that mitigation at the 1.8 acre west bank site is included (see recommendation #2);
2. Mitigate for the east bank pedestrian undercrossing of UPRR #4 with riparian restoration of the 1.8 acre site on the west bank as described in the July 16, 2001, Supplemental Description. Plans for this mitigation should be submitted to the Service for review.
3. Not construct a vehicular bridge at the former location of UPRR #3.
4. Plan and install as soon as possible, all remaining infill mitigation within Contract 3 as described in the GRR, including those sites in the vicinity of former UPRR #3 (sites 3A-6 and 3A-9), and Old Julian Street Bridge (sites 3A-1, 3A-3, and 3A-4). Sufficient assurances should be developed to protect this mitigation in perpetuity.
5. If essential to replace UPRR #4 in advance of completing the infill mitigation, proceed with this replacement and provide the Service with a schedule for bridge replacement and mitigation installation.
6. Provide the Service and other resource agencies with a complete and current accounting of the completion status of all infill mitigation sites for the Downtown Project.

7. In collaboration with SJRA, study alternative means of public access to the UPRR property of interest.

If you have any questions about this letter, please contact Steven Schoenberg of my staff at (916) 414-6564.

Sincerely,

A handwritten signature in black ink, appearing to read "David L. Harlow", written over a light gray rectangular background.

David L. Harlow
Acting Field Supervisor

cc:

Mario Parker, COE, Sacramento, CA
Gary Stern, NOAA-Fisheries, Santa Rosa, CA
Tami Schane, CDFG, Yountville, CA
Paul Amato, RWQCB, Oakland, CA
Al Gurevich, SCVWD, San Jose, CA
Dennis Korabiak, SJRA, San Jose, CA

REFERENCES

Jones and Stokes and Associates (JSA). 2001. Final Habitat Evaluation Procedures Analysis. Guadalupe River Project. Downtown San Jose, California. March 7, 2001. Sacramento, California.

. 2004. Final Water Year 2002 and 2003 Mitigation Monitoring Report for the Guadalupe River Project, Downtown San Jose, California. July 2004. Prepared for U.S. Army Corps of Engineers and Santa Clara Valley Water District by Jones and Stokes and Associates. Sacramento, California.

_____. 2006. Water Year 2005 Mitigation Monitoring Report for the Guadalupe River Project, Downtown San Jose, California. May 2006. Prepared for U.S. Army Corps of Engineers and Santa Clara Valley Water District by Jones and Stokes and Associates. Sacramento, California.

U.S. Army Corps of Engineers (Corps). 1985. Guadalupe River and Adjacent Streams Investigation. Final Guadalupe River Interim Feasibility Report and Environmental Impact Statement. San Francisco District. San Francisco, California.

_____. 1991. Guadalupe River, California. General Design Memorandum. December 1991 (two volumes + revised pages dated July 9, 1993). Sacramento District. Sacramento, California.

U.S. Army Corps of Engineers and Santa Clara Valley Water District (Corps and SCVWD). 2001. Integrated General Re-Evaluation Report/Environmental Impact Report - Supplemental Environmental Impact Statement for Proposed Modifications to the Guadalupe River Project, Downtown San Jose, California). Sacramento District. Sacramento, California.

Appendix C

List of Federal Threatened and Endangered Species



United States Department of the Interior

FISH AND WILDLIFE SERVICE

**Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825**



March 13, 2008

Document Number: 080313115150

Mr. Jeff Koschak
U.S. Army Corps of Engineers
1325 J Street
Sacramento, CA 95814

Subject: Species List for Guadalupe Vehicular Bridge

Dear: Mr. Koschak

We are sending this official species list in response to your March 13, 2008 request for information about endangered and threatened species. The list covers the California counties and/or U.S. Geological Survey 7½ minute quad or quads you requested.

Our database was developed primarily to assist Federal agencies that are consulting with us. Therefore, our lists include all of the sensitive species that have been found in a certain area *and also ones that may be affected by projects in the area*. For example, a fish may be on the list for a quad if it lives somewhere downstream from that quad. Birds are included even if they only migrate through an area. In other words, we include all of the species we want people to consider when they do something that affects the environment.

Please read Important Information About Your Species List (below). It explains how we made the list and describes your responsibilities under the Endangered Species Act.

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be June 11, 2008.

Please contact us if your project may affect endangered or threatened species or if you have any questions about the attached list or your responsibilities under the Endangered Species Act. A list of Endangered Species Program contacts can be found at www.fws.gov/sacramento/es/branches.htm.

Endangered Species Division

**Federal Endangered and Threatened Species that Occur in
or may be Affected by Projects in the Counties and/or
U.S.G.S. 7 1/2 Minute Quads you requested**

Document Number: 080313115150

Database Last Updated: January 31, 2008

Quad Lists

SAN JOSE WEST (427C)

Listed Species

Invertebrates

Euphydryas editha bayensis
bay checkerspot butterfly (T)

Fish

Hypomesus transpacificus
delta smelt (T)
Oncorhynchus mykiss
Central California Coastal steelhead (T) (NMFS)
Central Valley steelhead (T) (NMFS)
Critical habitat, Central California coastal steelhead (X) (NMFS)
Oncorhynchus tshawytscha
Central Valley spring-run chinook salmon (T) (NMFS)
winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

Ambystoma californiense
California tiger salamander, central population (T)
Rana aurora draytonii
California red-legged frog (T)

Birds

Rallus longirostris obsoletus
California clapper rail (E)
Sternula antillarum (=Sterna, =albifrons) browni
California least tern (E)

County Lists

No county species lists requested.

Key:

(E) *Endangered* - Listed as being in danger of extinction.

(T) *Threatened* - Listed as likely to become endangered within the foreseeable future.

(P) *Proposed* - Officially proposed in the Federal Register for listing as endangered or threatened.

(NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service.
Consult with them directly about these species.

Critical Habitat - Area essential to the conservation of a species.

(PX) *Proposed Critical Habitat* - The species is already listed. Critical habitat is being proposed for it.

(C) *Candidate* - Candidate to become a proposed species.

(V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.

(X) *Critical Habitat* designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, **or may be affected by** projects within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the surrounding quads through the California Native Plant Society's online [Inventory of Rare and Endangered Plants](#).

Surveying

Some of the species on your list may not be affected by your project. A trained biologist or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list.

For plant surveys, we recommend using the [Guidelines for Conducting and Reporting Botanical Inventories](#). The results of your surveys should be published in any environmental documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal [consultation](#) with the Service.

During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result

in a biological opinion by the Service addressing the anticipated effect of the project on listed proposed species. The opinion may authorize a limited level of incidental take.

- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.

Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See [critical habitat page](#) for maps.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Species of Concern

The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. [More info](#)

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield at this office at (916) 414-6580.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be June 11, 2008.